

DRAFT: Westlake Air Monitoring Recon Summary (4/3/14):

EPA is in the preliminary stages of developing an air monitoring plan to sample for landfill constituents prior to the isolation barrier installation. The plan is to document background conditions off the site prior to construction activities and to also monitor during construction activities to determine if any releases are occurring above health based benchmarks, and then to end the monitoring at the conclusion of the barrier installation. We envision setting up 4-5 monitoring locations surrounding the site in addition to on-site monitoring. We plan to sample for typical solid waste landfill gases such as sulfur dioxide (SO₂), hydrogen sulfide (H₂S), carbon monoxide (CO) and volatile organic compounds (VOCs). Radiation monitoring for radon, alpha, beta and gamma emissions will also be conducted.

Five air monitoring stations (see sites listed below): The plan is to place 5 monitoring location in/around the Bridgeton area. EPA will also plan to co-locate at least one station with MDNR (most likely at the trailer park). The data gathered from these locations will be published on the EPA and/or MDNR websites. The general public will have access to this information. EPA will not be providing hard copies to the monitoring locations or sites.

Radiation Monitoring – each station will have one (1) or more of the following devices: Thermoluminescent dosimeters (TLD's) / Alpha Track Detectors (ATD's) / Particulate Monitors (Radeco's) / E-Perms (Radon) / Saphymo/Genitron GammaTracers. The TLD data results will be reported monthly, in order to minimize dosimeter fade. The ATD data will be reported bi-monthly and should be analysis within two weeks after the sampling period. Air particulate monitoring and E-Perms data will be gathered weekly and reported as soon as the data can be quality controlled. Gamma tracers will collect data hourly and will provide gamma exposure rates over time (TBD) and track variations in background.

Air Monitoring – The system will consist of one (1) or more of the following type of equipment at each station: MultiRae / AreaRae / PbRae (will have to interact with VIPER or other radio telemetry communication system – it has a limited 2 mile radius maximum range - will need to use repeaters). The contaminants of concern are: SO₂, H₂S, CO, & VOC's. Results will be recorded hourly but the data will be reported on an 8 hour time weighted average. EPA will collocate equipment (when appropriate) and try to match MDNR's monitoring efforts for consistency and uniformity.

NOTE: MDNR has their alarms levels set as follows:

CO – 9ppm

SO₂ – Day: 0.10 ppm Night: 0.40 ppm

H₂S – Day: 0.30 ppm Night: 1.00 ppm

VOC – Day: 5.00 ppm Night: 10.00 ppm

LEL – Day: 5% Night: 10%

Gamma – 100 uR/Hour

O₂ – 19.50%

The AreaRaes are polled every 60 seconds, and the data recorded hourly. And they run one Summa canister sample per week. If there are hits they field screen with handheld instruments

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such as an UltraRae which reads in ppb. Data downloads are done at 1300 hours on Mondays and Thursdays. Data is sent to MDNR in Jefferson City who then posts the data. Alarms are sent out via text and e-mail to MDNR personnel on site. EPA will try to use the same type monitoring parameters for equipment consistency and duplication of effort.

Weather Stations: EPA will use existing area meteorological station data will be used (St. Louis Airport / National Weather Service) for temp, wind, speed, direction, barometric pressure, etc. Meteorological information can also be obtained from MDNRs met station they have set up at their trailer.

EPA placement for the five air monitoring locations (Kevin Larson is in the process of obtaining access agreements, power & security, public outreach, and general goodwill gestures the week of 3/31-4/4/14): Kevin Larson is also letting each location know that they can access the data on the EPA and/or MDNR websites. As part of the access agreement (as approved by Counsel), each monitoring station placement (location of use) will not be receiving bound or hard copy data or monitoring reports.

Location # 1 - Robertson Fire Protection District, 3820 Taussig Road, Bridgeton, MO (314) 291-6670. Monitoring station and EPA office trailer set up here (across the street, NE of the Westlake site).

Location # 2 - Pattonville Fire Department, 13900 St. Charles Rock Road, Bridgeton, MO 63044 (314) 739-3118. Monitors will be on the roof of the building and they would supply electrical power.

Location #3 - Pattonville Fire Department, 3365 McKelvey Road, Hazelwood, MO 63044 (314) 739-3310. Monitors will be on the roof of the building and they would supply electrical power and/or St. Charles Fire Department, 1550 South Main Street, St. Charles, MO 63303 (636) 949-3384.

Location #4 - Spanish Village Park, 12827 Spanish Village Drive, Bridgeton, MO 63044 (314) 291-8643 - facility has electric power. The roof of the restroom is sloped and may present an issue with our equipment being placed on the roof.

Location #5 – EPA will co-locate with MDNR (MDNR has set up Units 8, 10 and 12) at the trailer park at the intersection of St. Charles Rock Road and Bing Boulevard, Bridgeton, MO, 63044. As of 4/2/14, MDNR is negotiating a new access agreement for this or another location. When MDNR has completed this process, EPA will collocate our equipment at the same location.

Dates for implementation: April 1 – June 1, 2014 for access agreements, equipment procurement, technical assistance (START will provide a HASP, QAPP, JHA, Trip Report), site set up and preliminary background data gathering and assessment. The TO & IGCE have been completed and talks with START / Seagull are in progress.

West Lake Landfill: Air monitoring prior to Barrier Installation (call in 04012014 @ 1300 hours):

Five air monitoring stations: The plan is to place 5 monitoring location in/around the Bridgeton area (Kevin Larson is in the process of obtaining access agreements, power & security, public outreach, and general goodwill gestures the week of 3/31-4/4/14). As part of the access agreement (as approved by Counsel), each monitoring station placement (location of use) will not be receiving bound or hard copy data or monitoring reports. EPA will also plan to co-locate at least one station with MDNR (most likely at the trailer park). The data gathered from these locations will be published on the EPA and/or MDNR websites. The general public will have access to this information. EPA will not be providing hard copies to the monitoring locations or sites.

C. Tapia is writing the info for the website (will coordinate with Ben Washburn).

SOW talks planned with START (T. Faile / D. Kinroth) for 4/2/14.

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